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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,710	10/09/2001	Peggy-Jean P. Flanigan	55526US003	7863

32692 7590 09/22/2004

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EXAMINER
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SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/974,710	FLANIGAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Catherine Simone	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-17, 19-22 and 25-60 is/are pending in the application.
- 4a) Of the above claim(s) 36-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-17, 19-22, 25-35 and 53-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/2/04 has been entered.

***Withdrawn Rejections***

2. The objection of claims 59-62 and 67 of record in the Office Action mailed 3/2/04, Page 7, Paragraph 16 has been withdrawn due to the Applicants amendment filed 7/2/04.
3. The 35 U.S.C. 112 rejection of claims 1-8, 10-17 and 19-21 of record in the Office Action mailed 3/2/04, Pages 7-8, Paragraph #18 has been withdrawn due to the Applicants amendment filed 7/2/04.
4. The 35 U.S.C. 102 rejection of claims 22, 24, 26 and 27 as anticipated by Goepfert et al. of record in the Office Action mailed 3/2/04, Page 3, Paragraph #8 has been withdrawn due to the Applicants amendment filed 7/2/04.
5. The 35 U.S.C. 102 rejection of claims 28, 30 and 33-35 as anticipated by Calhoun et al. of record in the Office Action mailed 3/2/04, Pages 3-4, Paragraph #9 has been withdrawn due to the Applicants amendment filed 7/2/04.

6. The 35 U.S.C. 102 rejection of claims 53-55 as anticipated by Calhoun et al. of record in the Office Action mailed 3/2/04, Page 4, Paragraph #10 has been withdrawn due to the Applicants amendment filed 7/2/04.

7. The 35 U.S.C. 102 rejection of claims 1-8 and 19-21 as anticipated by Mazurek et al. of record in the Office Action mailed 3/2/04, Pages 8-9, Paragraph #20 has been withdrawn due to the Applicants amendment filed 7/2/04.

8. The 35 U.S.C. 102 rejection of claims 56-58 as anticipated by Hata of record in the Office Action mailed 3/2/04, Page 9, Paragraph #21 has been withdrawn due to the Applicants amendment filed 7/2/04.

9. The 35 U.S.C. 102 rejection of claims 63-65 as anticipated by Sher et al. of record in the Office Action mailed 3/2/04, Page 10, Paragraph #23 has been withdrawn due to the Applicants amendment filed 7/2/04.

10. The 35 U.S.C. 103 rejection of claim 25 over Goepfert et al. in view of Hata of record in the Office Action mailed 3/2/04, Page 5, Paragraph 12 has been withdrawn due to the Applicants amendment filed 7/2/04.

11. The 35 U.S.C. 103 rejection of claim 23 over Goepfert et al. in view of Calhoun et al. of record in the Office Action mailed 3/2/04, Pages 5-6, Paragraph 13 has been withdrawn due to the Applicants amendment filed 7/2/04.

12. The 35 U.S.C. 103 rejection of claim 31 over Calhoun et al. in view of Goepfert et al. of record in the Office Action mailed 3/2/04, Page 6, Paragraph 14 has been withdrawn due to the Applicants amendment filed 7/2/04.

13. The 35 U.S.C. 103 rejection of claims 10, 12, 14, 15 and 66 over Mazurek et al. in view of Hata of record in the Office Action mailed 3/2/04, Pages 10-11, Paragraph 25 has been withdrawn due to the Applicants amendment filed 7/2/04.

14. The 35 U.S.C. 103 rejection of claims 11, 13, 16 and 17 over Mazurek et al. in view of Sher et al. of record in the Office Action mailed 3/2/04, Pages 11-12, Paragraph 26 has been withdrawn due to the Applicants amendment filed 7/2/04.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. **Claims 1-8, 22, 25, 27 and 53-55** are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al. (5,212,011).

Regarding **claim 1**, Ishikawa et al. discloses an article comprising at least one adhesive layer with a first major surface and a second major surface (Fig. 2, #3), wherein at least one of the first and second major surfaces is a structured surface (Fig. 2, #5); and a cap layer (Fig. 2, #2) laminated to the structured surface of the adhesive layer (see col. 4, lines 53-56) wherein the exposed surface of the cap layer is unstructured (see col. 3, lines 45-50). Regarding **claim 2**, note the cap layer (Fig. 2, #2) is a backing. Regarding **claims 3 and 4**, note the at least one adhesive layer comprises a pressure sensitive adhesive, i.e. vinyl ethers, (see col. 4, lines 56-58).

Regarding **claim 5**, note the article has a thickness of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  (see col. 4,

lines 60-65). Regarding **claim 6**, note the adhesive layer is a structured adhesive layer (Fig. 2, #3). Regarding **claim 7**, note at least one further non-adhesive layer (Fig. 7, #2) in contact with one of the first and second major surfaces. Regarding **claim 8**, note the article comprises a non-structured exposed surface (Fig. 2, #4; also see col. 3, lines 46-50).

Regarding **claim 22**, Ishikawa et al. discloses a tape comprising at least one pressure sensitive adhesive layer (Fig. 2, #3) comprising a first major surface and a second major surface, wherein the first major surface is a structured surface (Fig. 2, #5) and the second major surface is a non-structured surface; and a non-adhesive cap layer (Fig. 2, #2) laminated to the first major surface (see col. 3, lines 46-50 and col. 4, lines 53-56). Regarding **claim 25**, note the tape has a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 inches to 0.007 inches (see Table 1 and Table 2). Regarding **claim 27**, note the cap layer is a structured layer (Figs. 2 and 6, #2).

Regarding **claim 53**, Ishikawa et al. discloses an article comprising at least one first layer (Fig. 2, #2) with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface (Fig. 2, #5); and a cap layer (Fig. 2, #3) laminated to a structured surface of the first layer, wherein the cap layer comprises an adhesive having a non-structured exposed surface (see col. 3, lines 46-50 and col. 4, lines 53-56).

Regarding **claim 54**, note the cap layer (Fig. 2, #3) is non-structured on both surfaces. Regarding **claim 55**, note the first layer comprises a polymeric film (see col. 4, lines 12-19).

17. **Claims 1, 3-8 and 21** are rejected under 35 U.S.C. 102(b) as being anticipated by Sekisui et al. (JP 07-090231).

Regarding **claim 1**, Sekisui et al. discloses an article comprising at least one adhesive layer with a first major surface and a second major surface (Fig. 1, #3), wherein at least one of the first and second major surfaces is a structured surface (Fig. 1, #2); and a cap layer (Fig. 1, #1) laminated to the structured surface of the adhesive layer wherein the exposed surface of the cap layer is unstructured (Fig. 1, #1). Regarding **claims 3 and 4**, note the adhesive layer is a pressure sensitive adhesive layer, i.e. acrylic (see abstract, line 12). Regarding **claim 5**, note the article has a thickness of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  (see abstract, lines 10-13). Regarding **claim 6**, note the adhesive layer is a structured adhesive layer (Fig. 1, #3). Regarding **claim 7**, note at least one further non-adhesive layer in contact with one of the first and second major surfaces (Fig. 1, #4). Regarding **claim 8**, note a non-structured exposed surface (Fig. 1, #1). Regarding **claim 21**, note the second major surface is a structured surface, the cap layer (Fig. 1, #1) contacts the first major surface, and wherein the article further comprises a backing layer on the second major surface (Fig. 1, #4).

18. **Claims 1-8, 11, 19, 20, 22, 26-35 and 53-55** are rejected under 35 U.S.C. 102(b) as being anticipated by Abe (WO 99/58620).

Regarding **claim 1**, Abe discloses an article comprising at least one adhesive layer with a first major surface and a second major surface (Figs. 3 and 4, #303 and #403), wherein at least one of the first and second major surfaces is a structured surface; and a cap layer (Figs. 3 and 4, #302 and #402) laminated to the structured surface of the adhesive layer (Figs. 3 and 4, #303 and #403) wherein the exposed surface of the cap layer is unstructured. Regarding **claim 2**, note the cap layer (Figs. 3 and 4, #302 and #402) is a backing. Regarding **claims 3 and 4**, note the at least one adhesive layer comprises a pressure sensitive adhesive, i.e. natural rubber, (see 8, lines 21-

23). Regarding **claim 5**, note the article has a thickness of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  (see page 9, lines 8-10). Regarding **claim 6**, note the adhesive layer is a structured adhesive layer (Figs. 3 and 4, #303 and #403). Regarding **claim 7**, note at least one further non-adhesive layer (Fig. 4, #405) in contact with one of the first and second major surfaces. Regarding **claim 8**, note the article comprises a non-structured exposed surface (Figs 3 and 4). Regarding **claim 11**, note a plurality of channels (Figs. 3 and 4; also see page 10, lines 10-15). Regarding **claim 19**, note the cap layer is a laminate (Fig. 4, #401 and #402). Regarding **claim 20**, note the second major surface is a non-structured surface (Fig. 4, #403), the cap layer (Fig. 4, #402) contacts the first major surface, and wherein the article further comprises a backing layer on the second major surface (Fig. 4, #405).

Regarding **claim 22**, Abe discloses a tape comprising at least one pressure sensitive adhesive layer (Figs. 3 and 4, #303 and #403) comprising a first major surface and a second major surface, wherein the first major surface is a structured surface and the second major surface is a non-structured surface; and a non-adhesive cap layer (Figs. 3 and 4, #302 and #402) laminated to the first major surface. Regarding **claim 26**, note a backing (Fig. 4, #405) adjacent the second major surface. Regarding **claim 27**, note the cap layer is a structured layer (Figs. 3 and 4, #302 and #402).

Regarding **claim 28**, note Abe discloses a laminate article comprising a first adhesive layer (Fig. 3, #303) having a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface, and a second adhesive layer (Fig. 3, #302) having a first major surface and second major surface, wherein at least one of the first and second major surfaces is a structured surface, wherein the first adhesive layer and the second



adhesive layer are in contact. Regarding **claim 29**, note the first major surface of the first adhesive layer is a structured surface and the second major surface of the first adhesive layer is a non-structured surface (Fig. 3, #303), and the first major surface of the second adhesive layer is a structured surface and the second major surface of the second adhesive layer is a non-structured surface (Fig. 3, #302), and the second major surface of the first adhesive layer contacts the first major surface of the second adhesive layer. Regarding **claim 30**, note a backing (Fig. 3, #301) on the second major surface of the second adhesive layer (Fig. 3, #302). Regarding **claim 31**, note a cap layer (Fig. 4, #405) on the first major surface of the first adhesive layer (Fig. 4, #403). Regarding **claim 32**, note the first major surface of the first adhesive layer (Fig. 3, #303) contacts the first major surface of the second adhesive layer (Fig. 3, #302). Regarding **claim 33**, note a backing layer (Fig. 4, #405) on the second major surface of the first adhesive layer (Fig. 4, #403). Regarding **claim 34**, note the first adhesive layer has a first pattern of structures on the first major surface thereof (Fig. 4, #403) and the second adhesive layer has a second pattern of structures on the first major surface thereof (Fig. 4, #402), and wherein the first pattern is substantially aligned with the second pattern. Regarding **claim 35**, note the first pattern (Fig. 3, #303) is misaligned with the second pattern (Fig. 3, #302).

Regarding **claim 53**, Abe discloses an article comprising at least one first layer (Fig. 3, #302) with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface; and a cap layer (Fig. 3, #303) laminated to a structured surface of the first layer, wherein the cap layer comprises an adhesive having a non-structured exposed surface (Fig. 3, #303). Regarding **claim 54**, note the cap layer (Fig. 3, #303)

is non-structured on both surfaces. Regarding **claim 55**, note the first layer comprises a polymeric film (see page 8, lines 1-5).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. **Claims 10,12,14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (US 5,212,011) in view of Hata (WO 97/33946).

Ishikawa et al. discloses an article comprising at least one adhesive layer with a first major surface and a second major surface (Fig. 2, #3), wherein at least one of the first and second major surfaces is a structured surface (Fig. 2, #5); and a cap layer (Fig. 2, #2) laminated to the structured surface of the adhesive layer (see col. 4, lines 53-56) wherein the exposed surface of the cap layer is unstructured (see col. 3, lines 45-50). However, Ishikawa et al. fails to disclose the article comprising a plurality of discrete reservoirs, each reservoir having a void volume of less than 100  $\mu$ l and containing at least one deliverable or non-deliverable substance. Hata teaches in the analogous art a plurality of discrete reservoirs (Fig. 1a, #4), each reservoir having a void volume of less than 100  $\mu$ l (see page 7, lines 21-23) and containing at least one deliverable or non-deliverable substance (see page 3, lines 1-12) for the purpose of producing an article having at least one adhesive layer with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the adhesive article in Ishikawa et al. to comprise a plurality of discrete reservoirs, with each reservoir having a void volume of less than 100  $\mu$ l and containing at least one deliverable or non-deliverable substance as suggested by Hata in order to produce an article having at least one adhesive layer with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface.

21. **Claims 11, 13, 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (US 5,212,011) in view of Sher et al. (US 6,197,397).

Ishikawa et al. discloses an article comprising at least one adhesive layer with a first major surface and a second major surface (Fig. 2, #3), wherein at least one of the first and second major surfaces is a structured surface (Fig. 2, #5); and a cap layer (Fig. 2, #2) laminated to the structured surface of the adhesive layer (see col. 4, lines 53-56) wherein the exposed surface of the cap layer is unstructured (see col. 3, lines 45-50). However, Ishikawa et al. fails to disclose a plurality of channels containing at least one deliverable or non-deliverable substance. Sher et al. teaches that it is old and well-known in the analogous art to have a plurality channels containing at least one deliverable or non-deliverable substance (see col. 5, lines 33-37) for the purpose of producing an adhesive article with a structured surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the adhesive layer in Ishikawa et al. to comprise a plurality of channels with at least one deliverable or non-deliverable substance as suggested by Sher et al. in order to provide a structured surface to an adhesive layer.

22. **Claims 56-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (WO 97/33946).

Regarding **claims 56 and 57**, Hata discloses at least one adhesive layer (Fig. 1b, #10) with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface (Fig. 1b, #12), and the structure surface comprises a plurality of discrete reservoirs (Fig. 1b, #4). However, Hata fails to disclose the volume of each reservoir being less than about 20 nL and having a void volume of less than about 4 nL. Hata teaches the volume of each reservoir being within a range of 0.8 to 600 mm<sup>3</sup> (see page 10, lines 30-32). Therefore, the optimum ranges for the volume and void volume of each reservoir would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the reservoirs in the adhesive sheet of Hata to each have a volume of less than about 20 nL and a void volume of less than about 4 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding **claims 58-60**, note the reservoirs contain at least one deliverable or non-deliverable substance (see page 3, lines 6-12).

### ***Response to Arguments***

23. Applicant's arguments with respect to claims 1-8, 10-17, 19-22, 25-35 and 53-60 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501.

The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*CAS*

Catherine Simone  
Examiner  
Art Unit 1772  
September 15, 2004

*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772*

*9/16/04*